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APPENDIX C

Computation of Effective Average and Marginal Tax Rates

Effective Average Rates

Tax liabilities attributable to total wages and salaries are shown in Table 28. In essence, the figures are the share of total reported tax liability prorated to wages and salaries on the basis of their share in AGI. The prorating of tax liability between functional components for each year was done by using the most detailed income class breakdown available (for instance, 28 groupings were used for 1962), which goes far in taking care of differences in the size distribution between wages and salaries and all other income. If all components of income were treated alike with respect to amount to be included in taxable income and with respect to tax rates, wages and salaries in a given income group would simply be assigned a share of total tax liability corresponding to the relative share in income reported for the group. Thus if wages and salaries were 90 per cent of reported income for the \$4,500–\$5,000 income group, 90 per cent of tax liability of that group would be attributed to wages and salaries.

Although this is essentially the method used to attribute tax liability to a functional component, it was altered by the necessity to take account of separate provisions of the tax law regarding specific components. For all of the years in Table 28, capital gains and losses were subject to separate tax treatment; over much of the period, dividends from domestic corporations were accorded a special credit, and for wages and salaries, as well as other income obtained through personal effort, the so-called earned-income credit was available until 1943. Tax liability attributed to wages and salaries is thus a function of (a) the relative distribution of wages and salaries by size of income of taxpayers

reporting, and (b) the extent to which special provisions apply. The net tax liability so obtained was divided by reported wages and salaries to obtain effective tax rates. The effective rate on total wages and salaries for a given year is thus simply a weighted average of the effective rates computed separately for some twenty-eight AGI groups. The weights are the amounts of wages and salaries reported for a given income group.

Effective Marginal Rates

Mean marginal rates are calculated to measure the change in tax liability associated with a small change in wages and salaries. The procedure used was to compute the change between income groups in tax liability per return and in taxable income per return. The change in tax liability was then divided by the change in taxable income, which gave a marginal tax rate. The rate thus computed was always assigned to the lower of the two income groups involved in computing the ratio. This procedure left the highest income group in the distribution—returns with more than \$1 million AGI—without a computed rate. The highest marginal rate in the schedule was therefore assigned to the (quantitatively unimportant) open-end group. It should be noted that the procedure employed in computing the marginal rates automatically takes into account variations, by income groups, in family size and marital status as well as variations in personal deductions.

The marginal rates computed for each of twenty-four income groups were then once more weighted to obtain a mean marginal rate. The weights used were the amounts of wages and salaries reported in the income group for which the marginal rate was computed. The mean marginal rate thus obtained gives most weight to the income groups with the greatest concentration of wages and salaries. The reasons for this procedure have been fully explained in the text. A second method for which results were presented in the text—weighting by frequencies—requires no further explanation.